

STATE

October 17, 2019

OF**TENNESSEE**

January 1, 2015

SPECIAL PROVISION**REGARDING****CONTRAST PAVEMENT MARKINGS****DESCRIPTION**

This work shall consist of the placement of a Contrast Pavement Marking system on concrete surfaces. The Contrast Pavement Marking System shall consist of either a white on black or yellow on black stripe. (see Detail 716CPM-1.) The Contrast Pavement Marking system shall be used on lane lines, edge lines and dotted lines and meet current Standard Specifications except as noted in this Provision.

MATERIALS

Provide materials that are specified as follows:

A. Thermoplastic Pavement Marking (White, Yellow, and Black)

1. White and Yellow thermoplastic pavement marking material shall meet requirements of subsection 919.01 of the Standard Specifications for the screed extrusion or ribbon dispenser methods.
2. Black contrast thermoplastic pavement marking material shall meet the following:
 - a. Have the same binder content as the white and yellow thermoplastic pavement marking material.
 - b. No glass beads shall be used with the thermoplastic pavement marking material.
 - c. Anti-Skid Abrasive Material
 - i. Black, abrasive material (boiler slag, coal slag, etc.)
 - ii. Fine material of No. 20 to No. 40 standard sieve size.
3. All thermoplastic systems shall provide white and black, or yellow and black thermoplastic as matching systems from the same manufacturer.

B. QPL List 1: Section B

An alternate to contrast thermoplastic pavement marking material shall be selected from the QPL list and is the Preformed Tape with a thickness of 80 mils minimum.

C. Certification

1. Furnish a manufacturer's certification to the Engineer for each lot furnished, certifying that the material supplied conforms to all requirements specified.
2. The certification shall include or have attached typical results of all required tests and the requirements it represents.

CONSTRUCTION REQUIREMENTS

Apply the Contrast Pavement Marking system according to the manufacturer's recommendations and subsection 716.03 of the Standard Specifications, to the concrete surfaces while within the proper application temperatures and after surface preparation as recommended by the material manufacturer.

A. Weather Limitations

Do **not** apply Contrast Pavement Marking to existing or new concrete surfaces unless the ambient air temperature and the temperature of the concrete pavement is 50°F or higher.

B. Application

1. To ensure optimum adhesion of the thermoplastic pavement marking material to concrete surfaces, apply a binder sealer material as recommended by the manufacturer.
2. Apply the black thermoplastic pavement marking material to the concrete surface at a thickness of 40 mils according to the manufacturer's recommendations and Standard Specifications.
3. Apply the anti-skid abrasive material immediately following the placement of the black thermoplastic pavement marking material before cooling of the thermoplastic has occurred. The application rate shall achieve complete coverage of the black thermoplastic marking material as determined by the manufacturer.
4. Apply the yellow or white thermoplastic pavement marking material by the extruded or ribbon dispensed methods on top of the black thermoplastic pavement marking at a thickness of 100 mils according to the manufacturer's recommendations and Standard Specifications. The white or yellow pavement marking will be applied on top of the black pavement marking to create the Contrast Pavement Marking System with a total thickness of 140 mils.
5. Apply the QPL approved Preformed Tape or Preformed Thermoplastic to the concrete surfaces according to manufacturer's recommendations and as specified in subsection 716.06 of the Standard Specifications.

C. Traffic Control

1. Traffic control shall be completed in accordance with the plans and/or contract documents.
2. All traffic control operations shall apply with the MUTCD at a minimum. Any changes must be approved by the engineer.

METHOD OF MEASUREMENT

The Department will measure the length of each of these markings, complete in place and accepted, as listed in the bid schedule, along the center of each line. Only the marked line will be measured for payment.

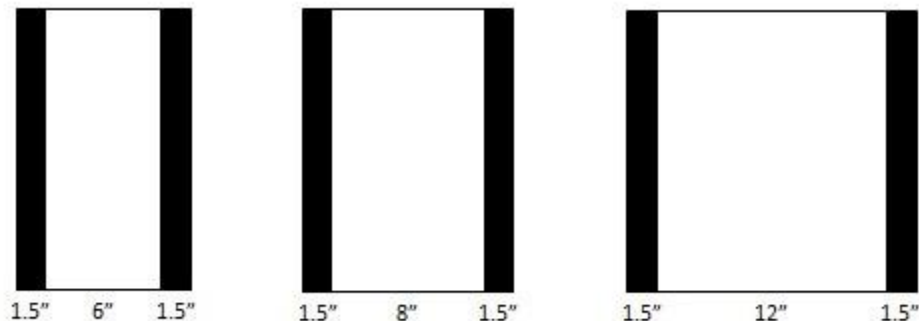
The Department will measure the pavement marking words and symbols complete in place and accepted, by each for these markings.

BASIS OF PAYMENT

The Department will pay for accepted quantities, complete in place, at the contract prices as follows:

Item No.	Description	Unit
716-09.86	CONTRAST PAVEMENT MARKING 6 INCH	LINEAR MILE
716-09.88	CONTRAST PAVEMENT MARKING 8 INCH	LINEAR MILE
716-09.89	CONTRAST PAVEMENT MARKING 12 INCH	LINEAR FEET
716-09.90	CONTRAST PAVEMENT MARKING 6 INCH DOTTED	LINEAR FEET
716-09.87	CONTRAST PAVEMENT MARKING, WORDS, AND SYMBOLS	EACH

Such payment is full compensation for preparation, layout, materials, labor, equipment, tools, royalties, and all other incidentals necessary to complete the work.

Detail 716CPM-1: Contrast Pavement Marking System

Contrast Pavement Marking, 6-inch with 1-1/2 inch black border

Contrast Pavement Marking, 8-inch with 1-1/2 inch black border

Contrast Pavement Marking, 12-inch with 1-1/2 inch black border